

CLAIMS

What is claimed is:

1. A system for streaming conversion of data from a first system to a second system, comprising:
 - an extractor component operable to extract a unit a of data from the first system;
 - a translator component operable to convert the unit of data from a first data format compatible with the first system to a second data format compatible with the second system; and
 - a loader component operable to load the unit of data converted to the second data format into the second system, the extractor, the translator, and loader components operable for conversion of the unit of data during normal operation of the first and second systems.
2. The system of Claim 1, wherein the extractor component reads the unit of data from the first system to extract the data.
3. The system of Claim 1, wherein the unit of data is further defined as an account having a portion of data in a first file and a portion of data in a second file, both the first and second files associated with the first system.
4. The system of Claim 1, wherein the unit of data is identified in the first system as converted to the second system after the loader component loads the unit of data into the second system.

5. The system of Claim 1, further comprising a hierarchy component operable to translate a hierarchy associated with the unit of data from the first data format to the second data format.

6. The system of Claim 1, wherein the extractor, the translator, and loader components operate in parallel to convert units of data from the first system to the second system.

7. A method of streaming conversion of data from a first system to a second system, comprising:

extracting a unit of data from a database associated with the first system;

translating the unit of data from a first format accessible by the first system to a second format accessible by the second system;

loading the translated unit of data into a database associated with the second system; and

accessing data normally from the first and second systems by at least one other system during the extraction, translation, and loading of the unit of data.

8. The method of Claim 7, further comprising:

extracting a second unit of data from the database associated with the first system while translating the unit of data; and

translating the second unit of data from the first format to the second format while loading the unit of data into the database associated with the second system.

9. The method of Claim 7, wherein the first and second systems are defined as billing systems.

10. The method of Claim 9, wherein the first system is further defined as a legacy billing system.

11. The method of Claim 7, further comprising locking the unit of data in the database associated with the first system to restrict access to the unit of data during the extracting, translating, and loading.

12. The method of Claim 11, further comprising updating an auditing component regarding a status of conversion of the unit of data.

13. The method of Claim 12, further comprising notifying a data warehouse that the unit of data has been converted to the second system.

14. The method of Claim 7, wherein the first system is further defined as a first billing system, the second system is further defined as a second billing system, and the unit of data is at least a portion of a customer account, and wherein the method further comprises:

extracting unbilled usage related to the customer account from the first billing system;

updating, for other systems, the location of the customer account to the second billing system;

posting, by one of the other systems, unbilled usage related to the customer account to the first billing system after updating the location of the customer account to the second billing system;

extracting the subsequently posted unbilled usage from the first billing system;

comparing the unbilled usage from the second billing system to the unbilled usage extracted from the first billing system to identify new unbilled usage related to the customer account; and

loading the new unbilled usage to the second billing system.

15. A system for streaming conversion of data, comprising:
- a first system having data in a first format;
 - a second system having data in a second format;
 - a data warehouse in communication with the first and second systems and operable to store portions of data from the first and second systems;
 - an auditing system operable to monitor changes to data in the first and second systems;
 - an enterprise system maintaining standards related to data in the first and second systems;
 - an extractor component operable to extract a unit of data from the first system;
 - a translator component operable to convert the unit of data from the first format compatible with the first system to the second format compatible with the second system;
 - a loader component operable to load the unit of data converted to the second format into the second system, the extractor, the translator, and loader components operable for conversion of the unit of data during normal operation of the first and second systems.
 - a audit component operable to notify the audit system regarding the conversion of the unit of data; and
 - a warehouse component operable to notify the data warehouse regarding the conversion of the unit of data to the second system.
16. The system of Claim 15, further comprising:
- a controller to parallelize conversion of the unit of data by directing the extractor component, the translator component, and the loader component.

17. The system of Claim 16, wherein the audit component and the warehouse component are operably coupled to the controller.
18. The system of Claim 16, further comprising a hierarchy component in communication with the controller and operable to translate hierarchy information related to the single customer.
19. The system of Claim 16, wherein the controller is operable to promote locking only a portion of data of the first system related to the unit of data such that the first system is operable with a second portion of the data of the first system during the conversion of the unit of data to the second system.
20. The system of Claim 19, wherein the second portion of data of the first system is further defined as the data of the first system other than the unit of data.
21. The system of Claim 15, wherein the first and second systems are further defined as billing systems and wherein the unit of data is further defined as account information for a customer.
22. The system of Claim 15, wherein the unit of data is further defined as account information for a single customer.
23. The system of Claim 22, wherein the unit of data comprises billing history for a single customer.

24. The system of Claim 15, further comprising:
- a plurality of extractor components each operable to extract separate units of data from the first system and write the extracted units of data to a file;
 - a plurality of translator components each operable to read one of the units of data from the file and convert the unit of data from the first format compatible with the first system to the second format compatible with the second system; and
 - a queue used by the plurality of extractors and plurality of translators to coordinate the extraction and translation of the units of data.
25. The system of Claim 24, wherein the unit of data comprises billing history for a single customer.